

AMENDMENT(S) TO THE CLAIMS

1-91 (cancelled)

92. (currently amended) A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; ~~and~~

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength; and

forming the fiber web on said imprinting band.

93. (previously presented) The method of claim 92, wherein said method is carried out using an imprinting screen as said imprinting band.

94. (previously presented) The method of claim 92, wherein said method is carried out using an imprinting membrane as said imprinting band.

95. (previously presented) The method of claim 92, wherein said pre-imprinting step occurs subsequent to a forming region relative to a running direction.

96. (cancelled)

97. (previously presented) The method of claim 92, wherein said pre-imprinting step further includes transferring the fiber web onto said imprinting band.

98. (previously presented) The method of claim 92, wherein said method is carried out using said imprinting band for said pre-imprinting step and for said fixing in said pressing step.

99. (previously presented) The method of claim 92, wherein at least one of said pre-imprinting step and said pressing step produce at least one of said first pressure field and said second pressure field using at least one suction element, said at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element
5 motivating the fiber web into an imprinting band surface structure.

100. (previously presented) The method of claim 99, wherein said method is carried out using at least one wet suction box as said at least one suction element.

101. (previously presented) The method of claim 92, wherein said pressing step includes gently pressing the fiber web in said second pressure field.

102. (previously presented) The method of claim 101, wherein said pressing step includes gently pressing the fiber web over a length extended in a running direction.

103. (previously presented) The method of claim 99, wherein said pressing step further includes producing said second pressure field in a press nip.

104. (currently amended) ~~The method of claim 103,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength;

wherein at least one of said pre-imprinting step and said pressing step produce at least one of said first pressure field and said second pressure field using at least one suction element, said
10 at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure,
said pressing step further includes producing said second pressure field in a press nip, said pressing step is carried out using a dryer cylinder and an opposing element producing said press nip therebetween, the fiber web guided through said press nip, the fiber web having a first side
15 and a second side, said first side contacting said dryer cylinder and said second side opposite said first side and contacting said imprinting band.

105. (previously presented) The method of claim 104, wherein said method is carried out using a Yankee cylinder as said dryer cylinder.

106. (previously presented) The method of claim 104, wherein said pressing step further includes a press shoe unit as said opposing element, said press shoe interacting with said dryer

cylinder and including a flexible band guided with a press shoe in a region of said press nip.

107. (previously presented) The method of claim 106, wherein said pressing step is carried out using a pressing roll including a flexible roll jacket as said press shoe unit.

108. (previously presented) The method of claim 104, wherein said pressing step is carried out using one of a pressing roll and a suction roll as said opposing element.

109. (previously presented) The method of claim 102, further including at least one of the steps of creping the fiber web and winding the fiber web following said pressing step.

110. (previously presented) The method of claim 92, wherein at least one of said pre-imprinting step and said pressing step produces said dry content $< 25\%$.

111. (previously presented) The method of claim 110, wherein said dry content is $< 15\%$.

112. (previously presented) The method of claim 110, wherein said dry content is $< 10\%$.

113. (previously presented) The method of claim 103, wherein said method is carried out using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web and said imprinting band guided together

over said suction device and through said press nip.

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114. (previously presented) The method of claim 113, wherein said method is carried out using said suction device with a curved surface and both the fiber web and said imprinting band are guided over said curved surface.

115. (previously presented) The method of claim 114, wherein said method is carried out using a suction roll as said suction device.

116. (previously presented) The method of claim 113, wherein said method is carried out using a hood providing a positive pressure and associated with said suction device to support an under pressure action of said suction device.

117. (previously presented) The method of claim 106, wherein said method is carried out using a length in a running direction of said press nip, including said drying cylinder and said press shoe, said length being greater than approximately 80 mm and said press shoe exhibiting over said length a maximum pressing pressure less than or equal to approximately 2.5 MPa.

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118. (previously presented) The method of claim 95, wherein said method is carried out using at least one dewatering screen with a zonally different screen permeability used in said forming region.

119. (previously presented) The method of claim 118, wherein said method is carried

out using a former with a circulating first dewatering band and a circulating second dewatering band, said first dewatering band and said second dewatering band having a tangential coincidence, said tangential coincidence forming a pulp run-in gap, said first dewatering band
5 and said second dewatering band both guided over said forming element, wherein said first dewatering band is an outer band absent of contact with said forming element and said second dewatering band is an inner band in contact with said forming element, at least one of said outer band and said inner band is said dewatering screen.

120. (previously presented) The method of claim 119, wherein said method is carried out using a forming roll as said forming element.

121. (previously presented) The method of claim 119, wherein said method is carried out using said inner band as said imprinting band and said outer band as said dewatering screen.

122. (previously presented) The method of claim 121, wherein said method is carried out transferring the fiber web from said inner band to an imprinting band.

123. (previously presented) The method of claim 103, wherein said pressing step further includes guiding said imprinting band through said press nip, said imprinting band having a first areal proportion of one of a plurality of raised zones and a plurality of closed zones, said imprinting band having a second areal proportion of one of a plurality of recessed zones and a
5 plurality of holes, said first areal proportion less than said second areal proportion resulting in a smaller areal proportion of the fiber web being pressed in said press nip.

124. (previously presented) The method of claim 123, wherein pressing step is carried out using one of an imprinting screen and an imprinting membrane as said imprinting band.

125. (previously presented) The method of claim 123, wherein said pressing step is carried out using said first areal proportion less than or equal to 40%.

126. (previously presented) The method of claim 123, wherein said pressing step is carried out using said first areal proportion is between approximately 20% and 30%.

127. (previously presented) The method of claim 123, wherein said pressing step is carried out using said first areal proportion is approximately 25%.

128. (previously presented) The method of claim 123, wherein said pressing step is carried out using said plurality of raised zones and said plurality of recessed zones resulting from a plurality of offsets, each said offset resulting from an intersection in a screen fabric of a pick and an end.

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129. (previously presented) The method of claim 92, wherein said method is carried out using at least one felt with a foamed layer for dewatering the fiber web.

130. (currently amended) ~~The method of claim 129,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength;

wherein said method is carried out using at least one felt with a foamed layer for dewatering the fiber web, said method being is carried out using said foamed layer with a

10 plurality of pores, each said pore having a maximum cross-section between approximately 3 μ m and 6 μ m.

131. (currently amended) ~~The method of claim 92,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength;

wherein said method is carried out using a spectra membrane for dewatering the fiber web.

132. (previously presented) The method of claim 131, wherein said method is carried out using a conventional screen used in combination with said spectra membrane.

133. (previously presented) The method of claim 131, wherein said method is carried out using a woven screen as said conventional screen.

134. (currently amended) ~~The method of claim 92,~~ A method for manufacturing a fiber
5 web having a three-dimensional surface structure and a strength, comprising the steps of:
pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band
using a first pressure field; and
pressing the fiber web onto said imprinting band using a second pressure field, said
pressing step further dewatering and drying the fiber web fixing the three-dimensional surface
10 structure and the strength;

wherein said method is carried out using an anti-rewetting membrane for dewatering the fiber web.

135. (previously presented) The method of claim 134, wherein said method is carried out using a conventional screen used in combination with said anti-rewetting membrane.

136. (previously presented) The method of claim 135, wherein said method is carried out using a woven screen as said conventional screen.

137. (previously presented) The method of claim 134, wherein said method is carried out using said anti-rewetting membrane in the absence of an additional screen.

138. (previously presented) The method of claim 92, wherein said method is carried out

using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll.

139. (previously presented) The method of claim 138, wherein said clothing is one of a screen, a felt with a foamed layer and a spectra membrane.

140. (currently amended) ~~The method of claim 139;~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength;

wherein said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll, said clothing
10 being one of a screen, a felt with a foamed layer and a spectra membrane;

wherein said clothing is in contact with at least one said suction roll.

141. (previously presented) The method of claim 140, wherein said method is carried out using said clothing combined with at least one of a conventional screen and an anti-rewetting membrane.

142. (previously presented) The method of claim 141, wherein said method is carried

out using a woven screen as said conventional screen.

143. (currently amended) ~~The method of claim 138,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and the strength;

wherein said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll, said method
10 being is carried out using said clothing in contact with at least one said suction roll.

144. (previously presented) The method of claim 143, wherein said method is carried out using said clothing combined with at least one of a conventional screen and an anti-rewetting membrane.

145. (previously presented) The method of claim 144, wherein said method is carried out using a woven screen as a conventional screen.

146. (currently amended) ~~The method of claim 138,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band

using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said
pressing step further dewatering and drying the fiber web fixing the three-dimensional surface
structure and the strength;

wherein said method is carried out using a clothing guided together with said imprinting
band, with the fiber web interposed therebetween, about at least one suction roll, said method
10 being is carried out using said clothing combined with at least one of a conventional screen and
an anti-rewetting membrane.

147. (previously presented) The method of claim 146, wherein said method is carried out using a woven screen as said conventional screen.

148. (previously presented) The method of claim 138, wherein said method is carried out using said clothing, said clothing is one of a screen, a felt with a foamed layer and a spectra membrane.

149. (currently amended) ~~The method of claim 148,~~ A method for manufacturing a
fiber web having a three-dimensional surface structure and a strength, comprising the steps of:
pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band
using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said
pressing step further dewatering and drying the fiber web fixing the three-dimensional surface
structure and the strength;

wherein said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll, said clothing
10 being one of a screen, a felt with a foamed layer and a spectra membrane, said method being is carried out using said clothing combined with at least one of a conventional screen and an anti-rewetting membrane.

150. (previously presented) The method of claim 149, wherein said method is carried out using a woven screen as a conventional screen.

151. (previously presented) The method of claim 138, wherein said method is carried out with at least one said suction roll having a diameter of between approximately 2 m and 3 m.

152. (previously presented) The method of claim 151, wherein said method is carried out with at least one said suction roll comprising a plurality of said suction rolls.

153. (previously presented) The method of claim 152, wherein said suction roll diameter is approximately 2 m.

154. (previously presented) The method of claim 138, further including the step of applying a vacuum to at least one said suction roll.

155. (currently amended) ~~The method of claim 138,~~ A method for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising the steps of:

pre-imprinting the fiber web at a dry content of less than 25% with an imprinting band
using a first pressure field; and

5 pressing the fiber web onto said imprinting band using a second pressure field, said
pressing step further dewatering and drying the fiber web fixing the three-dimensional surface
structure and the strength;

wherein said method is carried out using a clothing guided together with said imprinting
band, with the fiber web interposed therebetween, about at least one suction roll, said method
10 being is carried out using one of a siphon extractor and centrifugal force combined with at least
one said suction roll for dewatering the fiber web.

156. (previously presented) The method of claim 140, wherein said method is carried
out using an air knife combined with at least one said suction roll for dewatering the fiber web.

157. (previously presented) The method of claim 92, wherein said method is carried out
using a plurality of rolls arranged in parallel bounding a pressure space pressurized by a
compressed gas for driving out water from the fiber web, the fiber web and said imprinting band
guided together through said pressure space at least once.

5 158. (previously presented) The method of claim 157, wherein said method is carried
out using a plurality of membranes, the fiber web guided together with and positioned between
said plurality of membranes.

159. (previously presented) The method of claim 158, wherein said plurality of

membranes include an air distribution membrane and an anti-rewetting membrane.

160. (previously presented) The method of claim 92, wherein said method is carried out using said imprinting band with at least one of a thickness between approximately 1 mm and 3 mm and an open area greater than approximately 50%.

161. (previously presented) The method of claim 160, wherein said method is carried out using said open area greater than approximately 60%.

162. (previously presented) The method of claim 160, wherein said open area is between approximately 70% and 75%.

163. (previously presented) A method for dewatering a fiber web, comprising the steps of:

bounding a pressure space with at least four rolls;

pressurizing said pressure space with a compressed gas;

5 interposing the fiber web between a plurality of membranes; and

guiding the fiber web, said plurality of membranes and an imprinting band through said pressure space at least once.

164. (previously presented) The method of claim 163, wherein said plurality of membranes include an air distribution membrane and an anti-rewetting membrane.

165. (currently amended) An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band the fiber web being formed thereon;

a first pressure field pressing the fiber web onto said imprinting band, said first pressure
5 field producing the fiber web with a dry content of < 25%; and

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength.

166. (previously presented) The apparatus of claim 165, wherein said imprinting band is an imprinting screen.

167. (previously presented) The apparatus of claim 165, wherein said imprinting band is an imprinting membrane.

168. (previously presented) The apparatus of claim 166, further including a forming region, wherein said first pressure field is subsequent to said forming region relative to said running direction.

169. (cancelled)

170. (previously presented) The apparatus of claim 165, further including transferring

the fiber web onto said imprinting band at said first pressure field.

171. (previously presented) The apparatus of claim 165, wherein said imprinting band is used for a pre-imprinting and a fixing of the three-dimensional surface structure.

172. (previously presented) The apparatus of claim 165, wherein at least one of said first pressure field and said second pressure field is produced by an at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure.

173. (previously presented) The apparatus of claim 172, wherein said at least one suction element is a wet suction box.

174. (previously presented) The apparatus of claim 165, wherein the fiber web is pressed gently in said second pressure field.

175. (previously presented) The apparatus of claim 174, wherein the fiber web is pressed gently over a length extended in said running direction.

176. (previously presented) The apparatus of claim 165, wherein a press nip produces said second pressure field.

177. (currently amended) ~~The apparatus of claim 176,~~ An apparatus for manufacturing a

fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

a first pressure field pressing the fiber web onto said imprinting band, said first pressure
5 field producing the fiber web with a dry content of < 25%; and

a second pressure field pressing the fiber web onto said imprinting band, said second
pressure field subsequent to said first pressure field in a running direction, said second pressure
field further dewateres and dries the fiber web fixing the three dimensional surface structure and
strength;

10 wherein a press nip produces said second pressure field, said press nip is produced
between a dryer cylinder and an opposing element, the fiber web guided through said press nip,
the fiber web having a first side and a second side, said first side contacting said dryer cylinder,
and said second side opposite said first side and contacting said imprinting band.

178. (previously presented) The apparatus of claim 177, wherein said dryer cylinder is a
Yankee cylinder.

179. (previously presented) The apparatus of claim 177, wherein said opposing element
is a shoe press unit, said shoe press unit interacts with said dryer cylinder and further including a
flexible band guided with a press shoe in a region of said press nip.

180. (previously presented) The apparatus of claim 179, wherein said press shoe unit is a
pressing roll including a flexible roll jacket.

181. (previously presented) The apparatus of claim 177, wherein said opposing element is a suction press roll, with at least one of a soft liner and a low pressing pressure, interacting with said dryer cylinder.

182. (previously presented) The apparatus of claim 177, wherein said opposing element is one of a pressing roll and a suction roll, interacting with said dryer cylinder.

183. (previously presented) The apparatus of claim 177, further including means for at least one of drying the fiber web on said dryer cylinder, creping the fiber web and subsequently winding the fiber web.

184. (previously presented) The apparatus of claim 165, wherein at least one of said first pressure field and said second pressure field produces the fiber web with a dry content of $< 25\%$.

185. (previously presented) The apparatus of claim 184, wherein said dry content is $< 15\%$.

186. (previously presented) The apparatus of claim 184, wherein said dry content is $< 10\%$.

187. (previously presented) The apparatus of claim 176, further including a suction device located in a position relative to said running direction between said suction element and said press nip, with said fiber web and said imprinting band guided together over said suction

device and through said press nip.

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188. (previously presented) The apparatus of claim 187, wherein said suction device has a curved surface and both the fiber web and said imprinting band are guided over said curved surface.

189. (previously presented) The apparatus of claim 188, wherein said suction device is a suction roll.

190. (previously presented) The apparatus of claim 187, further including a hood providing a positive pressure and associated with said suction device to support an underpressure action of said suction device.

191. (previously presented) The apparatus of claim 179, wherein a length in said running direction of said press nip, including said dryer cylinder and said press shoe, is greater than approximately 80 mm and said press shoe exhibits over said length a maximum pressing pressure less than or equal to approximately 2.5 MPa.

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192. (previously presented) The apparatus of claim 168, further including at least one dewatering screen with a zonally different screen permeability used in said forming region

193. (previously presented) The apparatus of claim 192, further including a former with a forming element, a circulating first dewatering band and a circulating second dewatering band,

said first dewatering band and said second dewatering band having a tangential coincidence, said tangential coincidence forming a pulp run-in gap, said first dewatering band and said second
5 dewatering band both guided over said forming element, wherein said first dewatering band is an outer band absent of contact with said forming element and said second dewatering band is an inner band in contact with said forming element, at least one of said outer band and said inner band is said dewatering screen.

194. (previously presented) The apparatus of claim 193, wherein said forming element is a forming roll.

195. (previously presented) The apparatus of claim 193, wherein said inner band is said imprinting band and said outer band is said dewatering screen.

196. (previously presented) The apparatus of claim 195, wherein the fiber web is transferred from said inner band to an imprinting band.

197. (previously presented) The apparatus of claim 176, wherein said imprinting band is guided through said press nip, said imprinting band having a first areal proportion of one of a plurality of raised zones and a plurality of closed zones, said imprinting band having a second areal proportion of one of a plurality of recessed zones and a plurality of holes, said first areal
5 proportion less than said second areal proportion resulting in a smaller areal proportion of the fiber web being pressed in said press nip.

198. (previously presented) The apparatus of claim 197, wherein said imprinting band is one of an imprinting screen and an imprinting membrane.

199. (previously presented) The apparatus of claim 197, wherein said first areal proportion is less than or equal to 40%.

200. (previously presented) The apparatus of claim 197, wherein said first areal proportion is between approximately 20% and 30%.

201. (previously presented) The apparatus of claim 197, wherein said first areal proportion is approximately 25%.

202. (previously presented) The apparatus of claim 197, wherein said plurality of raised zones and said plurality of recessed zones resulting from a plurality of offsets, each said offset resulting from an intersection in a screen fabric of a pick and an end.

203. (previously presented) The apparatus of claim 165, further including at least one felt with a foamed layer for dewatering the fiber web.

204. (currently amended) ~~The apparatus of claim 203, wherein~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and
 10 strength; and

at least one felt with a foamed layer for dewatering the fiber web, said foamed layer having has a plurality of pores, each said pore having a maximum cross-section between approximately 3 μm and 6 μm .

205. (currently amended) ~~The apparatus of claim 165, further including~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and
 10 strength; and

 a spectra membrane, the fiber web positioned between said spectra membrane and said imprinting band for a length of said imprinting band in said running direction, said spectra membrane for dewatering the fiber web.

206. (previously presented) The apparatus of claim 205, further including a conventional screen used in combination with said spectra membrane.

207. (previously presented) The apparatus of claim 206, wherein said conventional screen is a woven screen.

208. (currently amended) ~~The apparatus of claim 165, further including~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and
10 strength; and

an anti-rewetting membrane, the fiber web positioned between said anti-rewetting membrane and said imprinting band for a length of said imprinting band in said running direction, said anti-rewetting membrane for dewatering the fiber web.

209. (previously presented) The apparatus of claim 208, further including a conventional screen used in combination with said anti-rewetting membrane.

210. (previously presented) The apparatus of claim 209, wherein said conventional screen is a woven screen.

211. (previously presented) The apparatus of claim 208, wherein said anti-rewetting membrane is used in the absence of an additional screen.

212. (previously presented) The apparatus of claim 165, further including a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll.

213. (previously presented) The apparatus of claim 212, wherein said clothing is one of a screen, a felt with a foamed layer and a spectra membrane.

214. (currently amended) ~~The apparatus of claim 213, wherein~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and

10 strength; and

a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll, said clothing being one of a screen, a felt with a foamed layer and a spectra membrane, said clothing being is in contact with at least one said suction roll.

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215. (previously presented) The apparatus of claim 214, wherein said clothing is combined with at least one of a conventional screen and an anti-rewetting membrane.

216. (previously presented) The apparatus of claim 215, wherein said conventional screen is a woven screen.

217. (currently amended) ~~The apparatus of claim 212, wherein~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and

10. strength; and

a clothing and at least one suction roll, said clothing guided together with said imprinting

band, with the fiber web interposed therebetween, about at least one said suction roll, said clothing being is in contact with at least one said suction roll.

218. (previously presented) The apparatus of claim 217, wherein said clothing is combined with at least one of a conventional screen and an anti-rewetting membrane.

219. (previously presented) The apparatus of claim 218, wherein said conventional screen is a woven screen.

220. (currently amended) ~~The apparatus of claim 212, wherein~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and
10 strength; and

a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll, said clothing being is combined with at least one of a conventional screen and an anti-rewetting membrane.

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221. (previously presented) The apparatus of claim 220, wherein said conventional screen is a woven screen.

222. (previously presented) The apparatus of claim 212, wherein said clothing is one of a screen, a felt with a foamed layer and a spectra membrane.

223. (currently amended) ~~The apparatus of claim 222, wherein~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and
10 strength; and

a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll, said clothing being one of a screen, a felt with a foamed layer and a spectra membrane, said clothing being is combined with at least one of a conventional screen and an anti-rewetting membrane.

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224. (previously presented) The apparatus of claim 223, wherein said conventional

screen is a woven screen.

225. (previously presented) The apparatus of claim 212, wherein at least one said suction roll has a diameter of between approximately 2 m and 3 m.

226. (previously presented) The apparatus of claim 225, wherein at least one said suction roll comprises a plurality of said suction rolls.

227. (previously presented) The apparatus of claim 226, wherein said diameter is approximately 2 m.

228. (previously presented) The apparatus of claim 212, wherein a vacuum is applied to at least one said suction roll.

229. (currently amended) ~~The apparatus of claim 212, further including~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and

10 strength;

a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll; and

one of a siphon extractor and centrifugal force combined with at least one said suction roll for dewatering the fiber web.

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230. (currently amended) ~~The apparatus of claim 212, further including~~ An apparatus for manufacturing a fiber web having a three-dimensional surface structure and a strength, comprising:

an imprinting band;

5 a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of < 25%;

a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and

10 strength;

a clothing and at least one suction roll, said clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one said suction roll; and

an air knife combined with at least one said suction roll for dewatering the fiber web.

231. (previously presented) The apparatus of claim 165, further including a plurality of rolls arranged in parallel bounding a pressure space pressurized by a compressed gas for driving out water from the fiber web, the fiber web and said imprinting band guided together through

said pressure space at least once.

232. (previously presented) The apparatus of claim 231, further including a plurality of membranes, the fiber web guided together with and positioned between said plurality of membranes.

233. (previously presented) The apparatus of claim 232, wherein said plurality of membranes includes an air distribution membrane and an anti-rewetting membrane.

234. (previously presented) The apparatus of claim 165, wherein said imprinting membrane has at least one of a thickness between approximately 1 mm and 3 mm and an open area greater than approximately 50%.

235. (previously presented) The apparatus of claim 234, wherein said open area is greater than approximately 60%.

236. (previously presented) The apparatus of claim 234, wherein said open area is between approximately 70% and 75%.

237. (previously presented) An apparatus for dewatering a fiber web, comprising:
a plurality of membranes;
an imprinting band, said imprinting band and the fiber web positioned between said plurality of membranes; and

5 a plurality of rolls arranged in parallel bounding a pressure space pressurized by a compressed gas for driving out water from the fiber web, the fiber web, said imprinting band and said plurality of membranes guided together through said pressure space at least once.

238. (currently amended) ~~The method of claim 237, wherein said~~ An apparatus for dewatering a fiber web, comprising:

a plurality of membranes including ~~include~~ an air distribution membrane and an anti-rewetting membrane;

5 an imprinting band, said imprinting band and the fiber web positioned between said plurality of membranes; and

a plurality of rolls arranged in parallel bounding a pressure space pressurized by a compressed gas for driving out water from the fiber web, the fiber web, said imprinting band and said plurality of membranes guided together through said pressure space at least once.

10 239. (new) A method for manufacturing a fiber web having a three dimensional surface structure and a string, comprising the steps of:

pre-printing the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field;

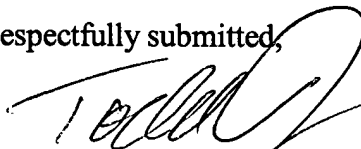
5 pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and its strength, said second pressure field being produced in a press nip;

where at least one of said pre-imprinting step and said pressing step produce at least one of said pressure field and said second pressure field using at least one suction element, said at least

- 10 one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure; and
- using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web in said imprinting band guided together over said suction device and through said press nip, thereby passing air first through said
- 15 imprinting band before passing through the fiber web.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



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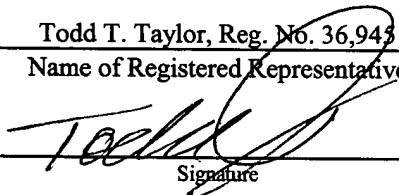
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: December 23, 2004.

Todd T. Taylor, Reg. No. 36,945

Name of Registered Representative



Signature

December 23, 2004

Date